

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
18 November 2004 (18.11.2004)

PCT

(10) International Publication Number
WO 2004/099735 A1

(51) International Patent Classification: **G01F 1/84**

(21) International Application Number:
PCT/US2003/011959

(22) International Filing Date: **17 April 2003 (17.04.2003)**

(25) Filing Language: **English**

(26) Publication Language: **English**

(71) Applicant (for all designated States except US): **MICRO
MOTION, INC. [US/US]; 7070 Winchester Circle, Boul-
der, CO 80301 (US).**

(72) Inventor; and

(75) Inventor/Applicant (for US only): **VAN CLEVE, Craig,
Brainerd [US/US]; 2921 Stagecoach Trail, P.O. Box 1382,
Lyons, CO 80540 (US).**

(74) Agents: **OLLILA, Curtis, J. et al.; DUFT SETTER
OLLILA & BORNSEN LLC, 2060 Broadway, Suite 300,
Boulder, CO 80302 (US).**

(81) Designated States (national): **AE, AG, AL, AM, AT, AU,
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,**

**CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,
MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD,
SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US,
UZ, VC, VN, YU, ZA, ZM, ZW.**

(84) Designated States (regional): **ARIPO patent (GH, GM,
KB, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO,
SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM,
GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).**

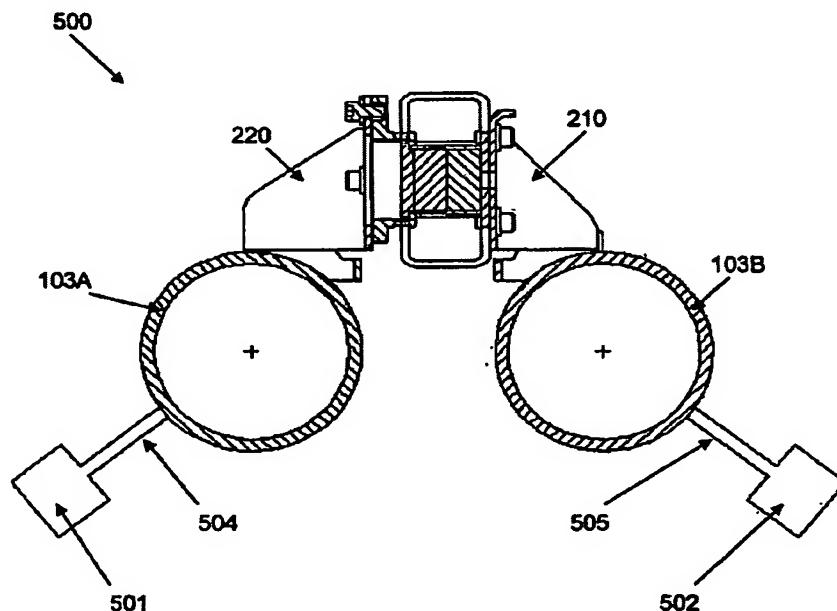
Declaration under Rule 4.17:

— *as to applicant's entitlement to apply for and be granted
a patent (Rule 4.17(ii)) for the following designations AE,
AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH,
CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG,
KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK,
MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU,
SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG,*

[Continued on next page]

BEST AVAILABLE COPY

(54) Title: **METHOD AND APPARATUS FOR FORCE BALANCING OF A CORIOLIS FLOW METER**



(57) Abstract: **A Coriolis flow meter comprising at least one flow conduit, a drive system coupled to the at least one flow conduit, a balance system coupled to the at least one flow conduit wherein the balance system is sized and located such that the momentum of the balance system is equal and opposite to the momentum of the drive system.**

WO 2004/099735 A1